

## ABSTRACT OF THE DISCLOSURE

A system for suppressing ambient signals from a signal containing radiated emissions of a electronic device and ambient signals. The system comprises a first receiver operative to receive the ambient signals and the radiated emissions from the electronic device. The first receiver is operative to demodulate and digitize the ambient signals and the radiated emissions. The system further comprises a second receiver operative to receive primarily the ambient signals wherein the second receiver is time and frequency synchronized to the first receiver and operative to demodulate and digitize the ambient signals. A central computer is in electrical communication with the first and second receivers and is operative to store and process the ambient signals and the radiated emissions from respective ones of the first and second receivers. Accordingly, the central computer is configured as an adaptive filter operative to suppress the ambient signals correlated between the first and second receivers. Therefore, the radiated emissions from the electronic device are extracted thereby.